

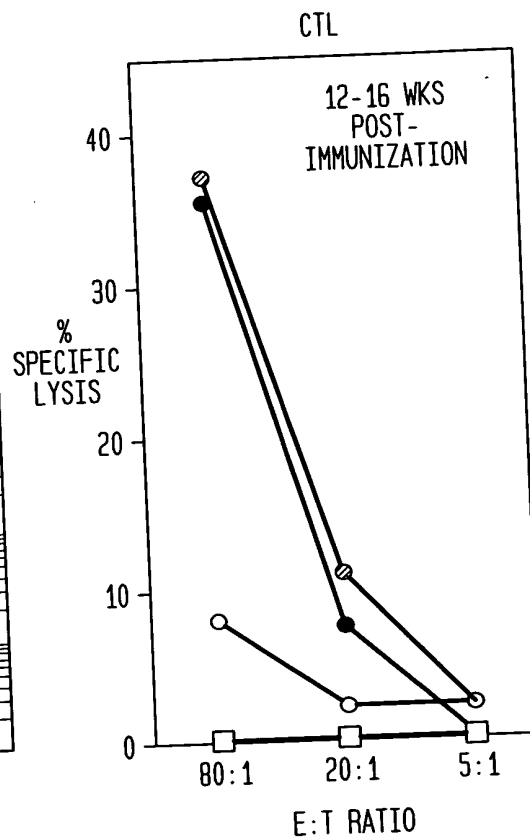
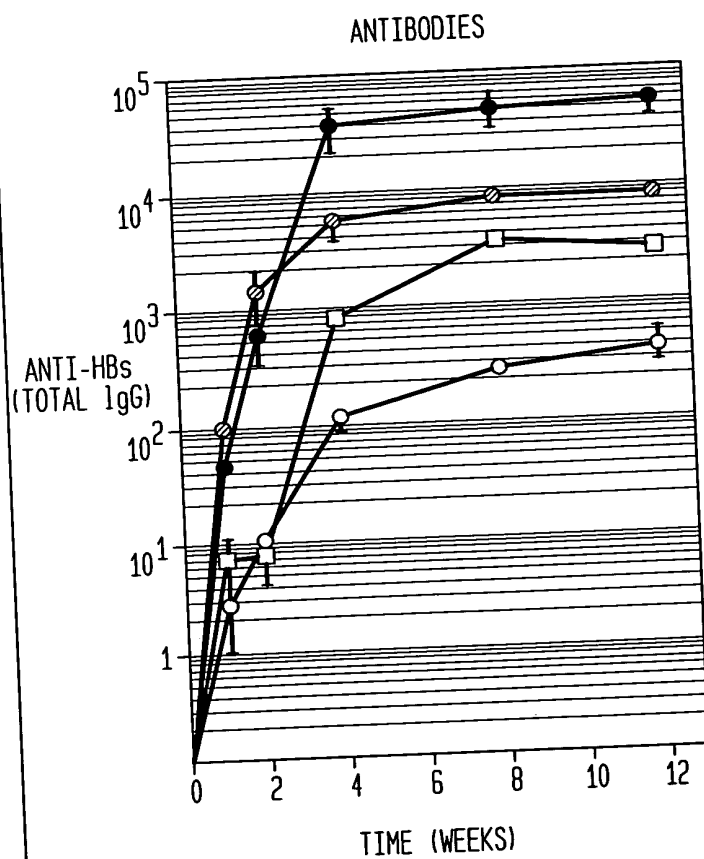
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FIG. 1

CpG ODN, ALONE OR COMBINED WITH ALUM
 AUGMENT HBsAg-SPECIFIC HUMORAL AND CTL RESPONSES
 IN ADULT BALB/c MICE

1 μ g rHBsAg

- ⊗ + CpG ODN (100 μ g)
- + CpG ODN + alum
- + alum
- NO ADJUVANT

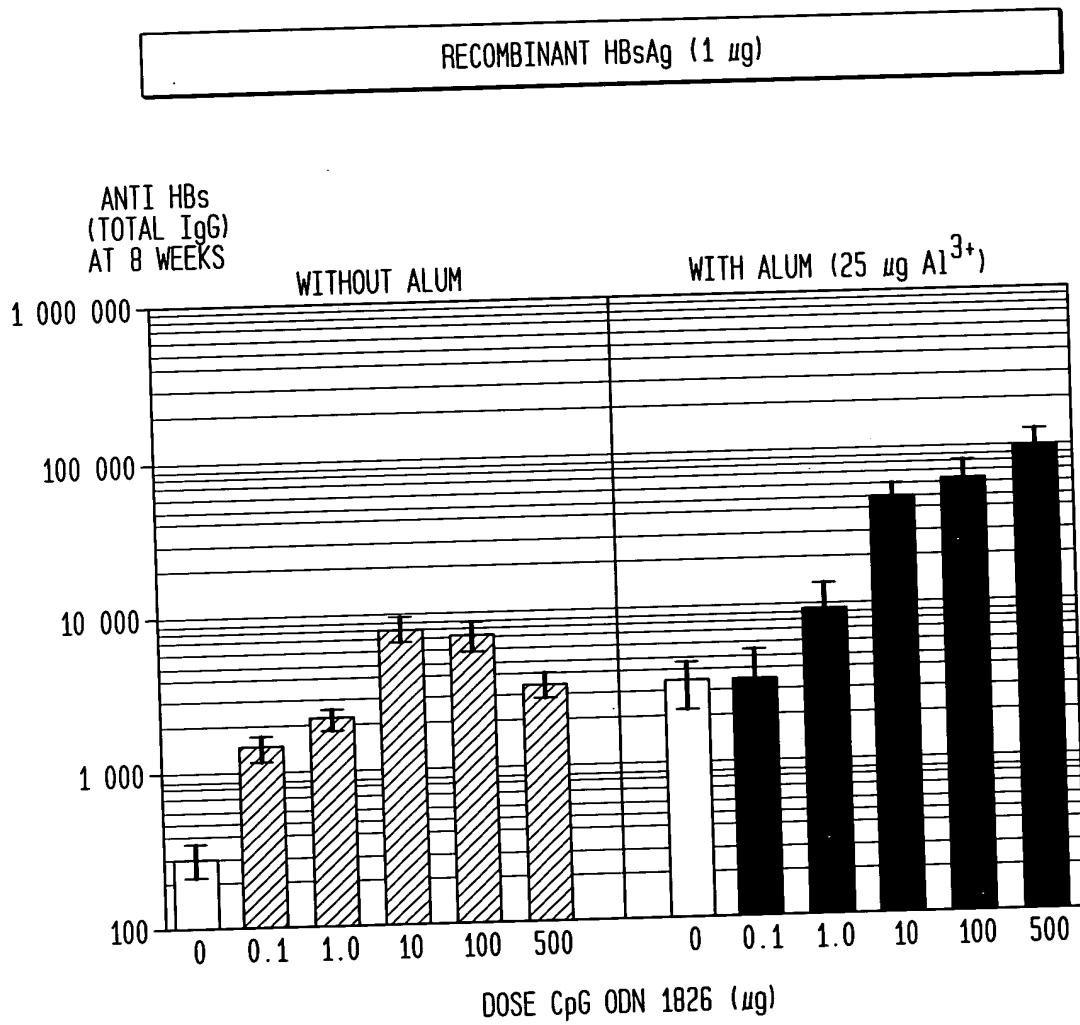


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FIG. 2

IMMUNOSTIMULATORY CpG ODN AS AN ADJUVANT FOR
HBV VACCINE: EFFECT OF DOSE IN BALB/c MICE



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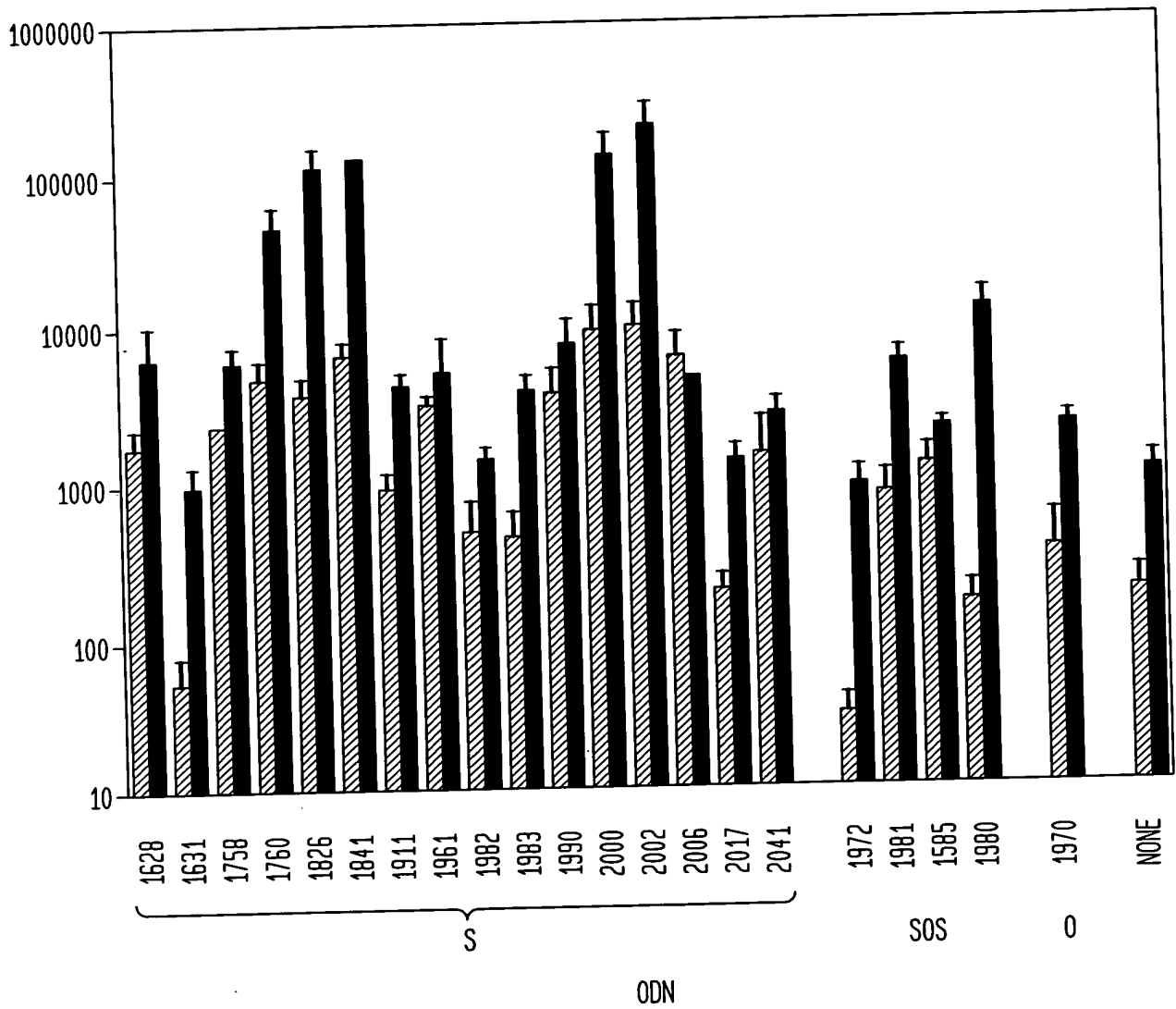
FIG. 3

HUMORAL RESPONSES AGAINST HBsAg IN BALB/c MICE WITH
DIFFERENT CpG ODN 1 μ g rHBsAg + 10 ODN



ANTI-HBs TITERS
(TOTAL IgG)
AT 4 WKS

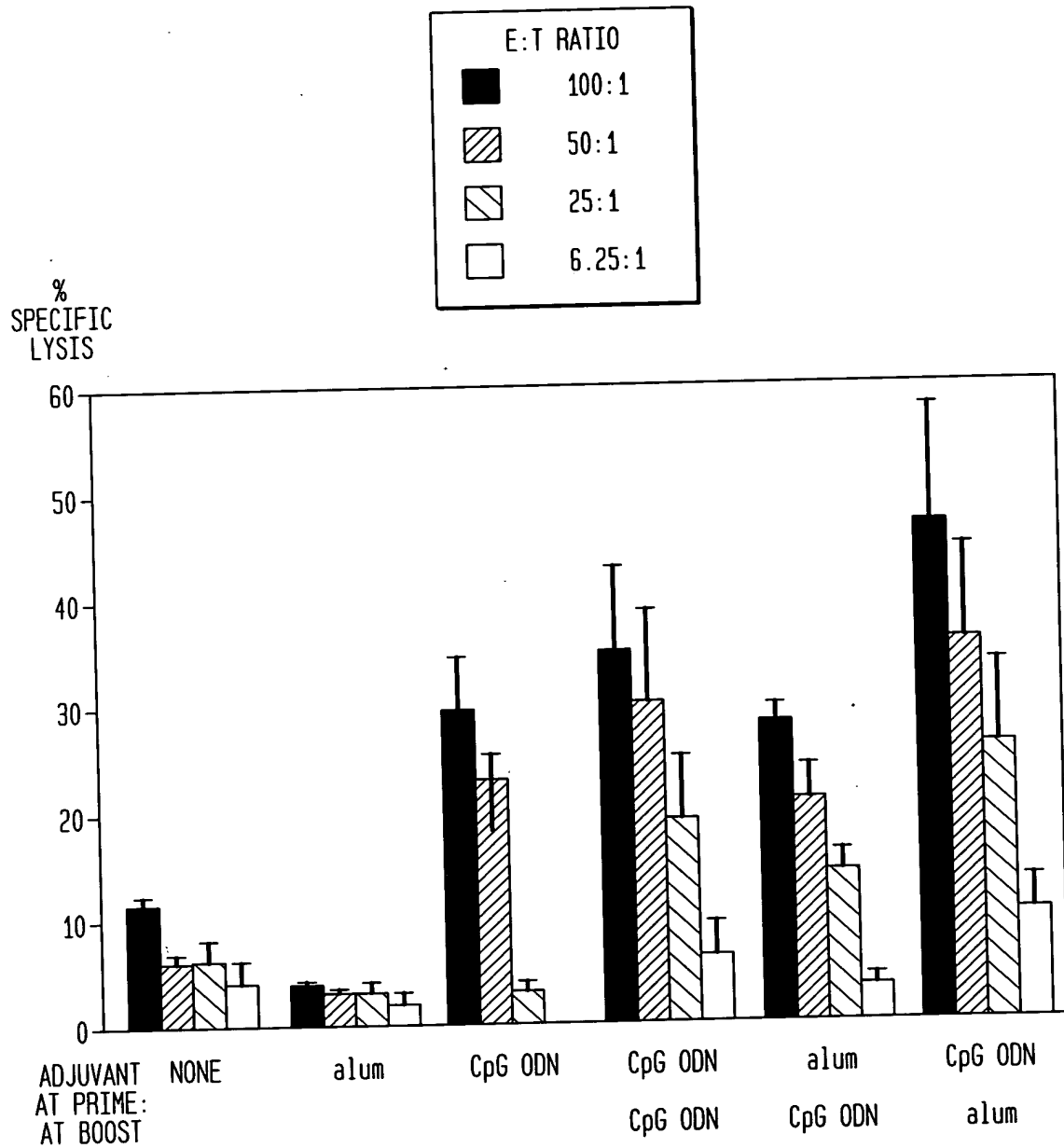
1000000
100000
10000
1000
100
10



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FIG. 4

CTL RESPONSES IN BALB/c MICE WITH CpG ODN AND/OR
ALUM AS ADJUVANT IN PRIME-BOOST STRATEGIES



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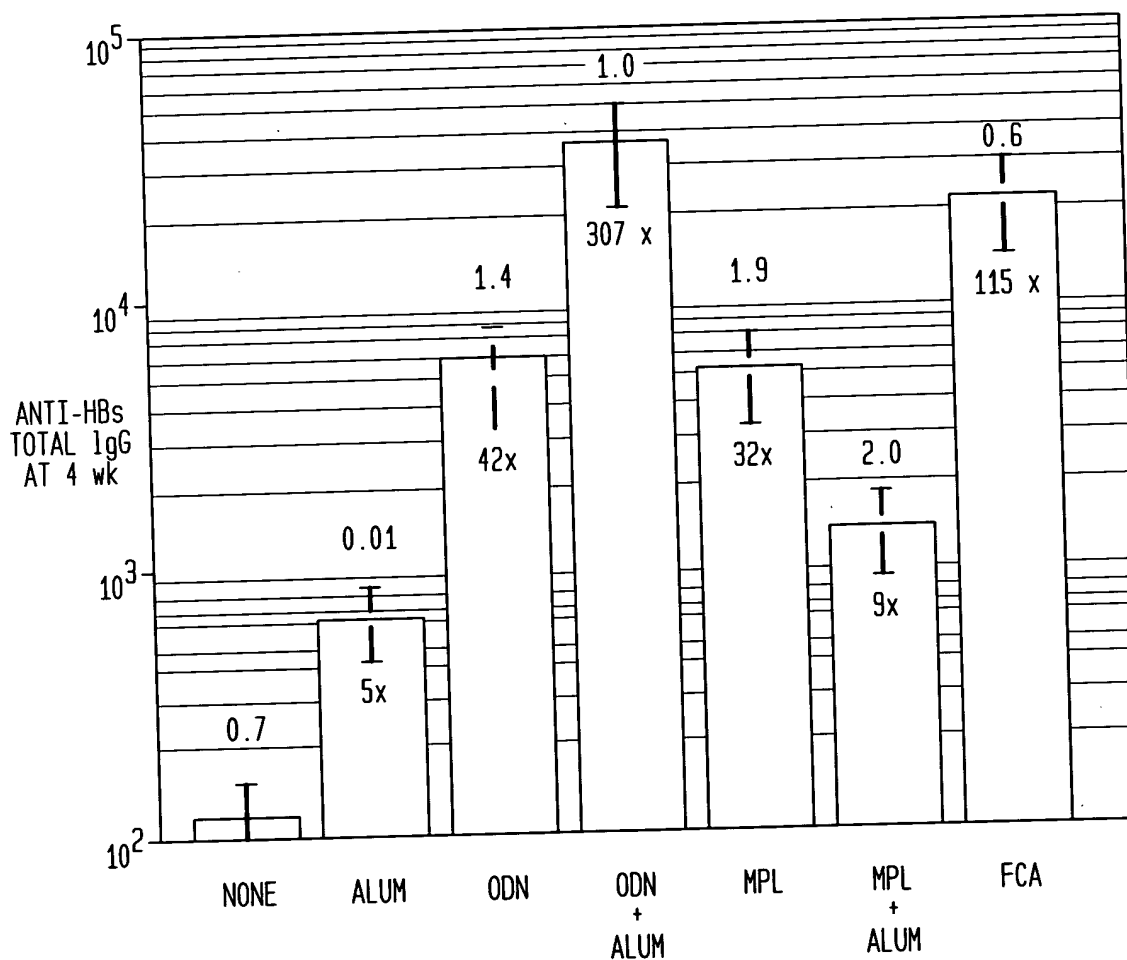
FIG. 5

COMPARISON OF DIFFERENT ADJUVANTS FOR IMMUNIZATION
OF BALB/c MICE AGAINST rHBsAg

| HBsAg (1μg) + | |
|---------------|---------|
| ALUM | 25 μg |
| CpG ODN | 10 μg |
| MPL | 50 μg |
| FCA | 1:1 v/v |

NUMBERS ABOVE BARS ARE RATIO
OF IgG2a:IgG1 WHERE A NUMBER > 1
INDICATES A Th1-TYPE RESPONSE

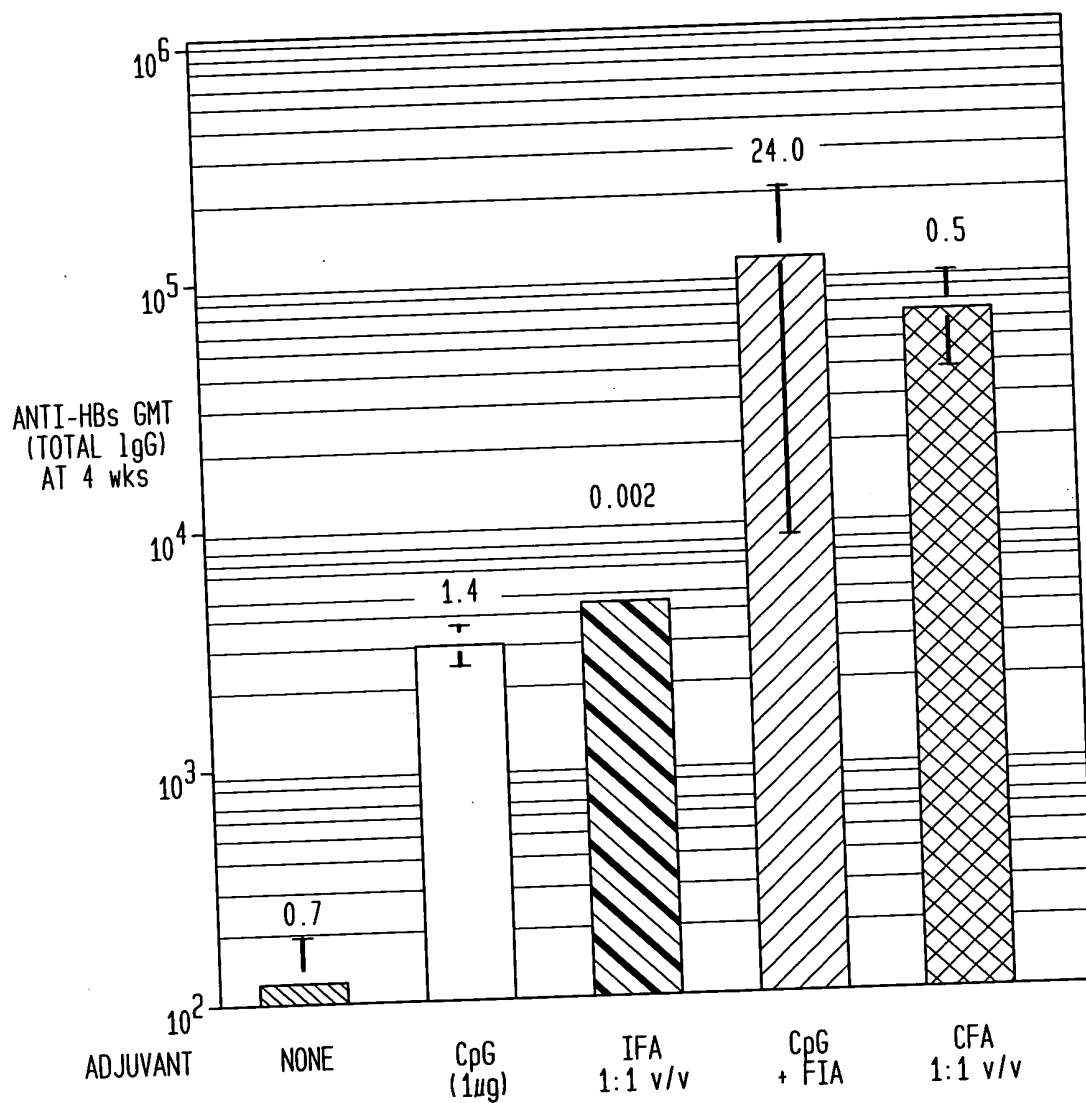
NUMBERS ON BARS ARE NUMBER-
FOLD INCREASE OVER HBsAg
ALONE FOR ANTI-HBs TOTAL IgG



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FIG. 6

1 μ g HBsAg IN BALB/c MICE

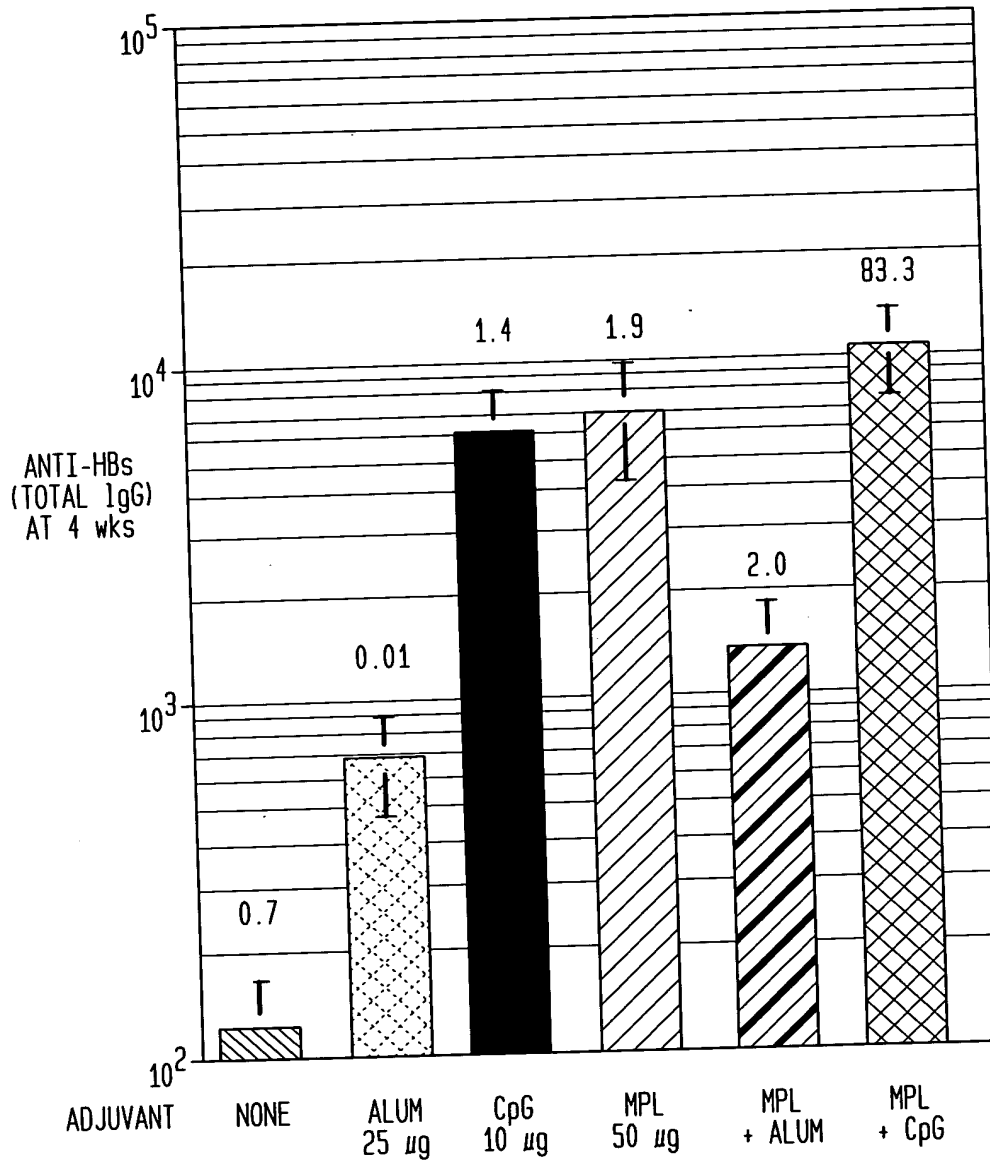


* THE NUMBER ABOVE EACH BAR IS RATIO OF IgG2a/IgG1

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FIG. 7

1 μ g HBsAg IN BALB/c MICE

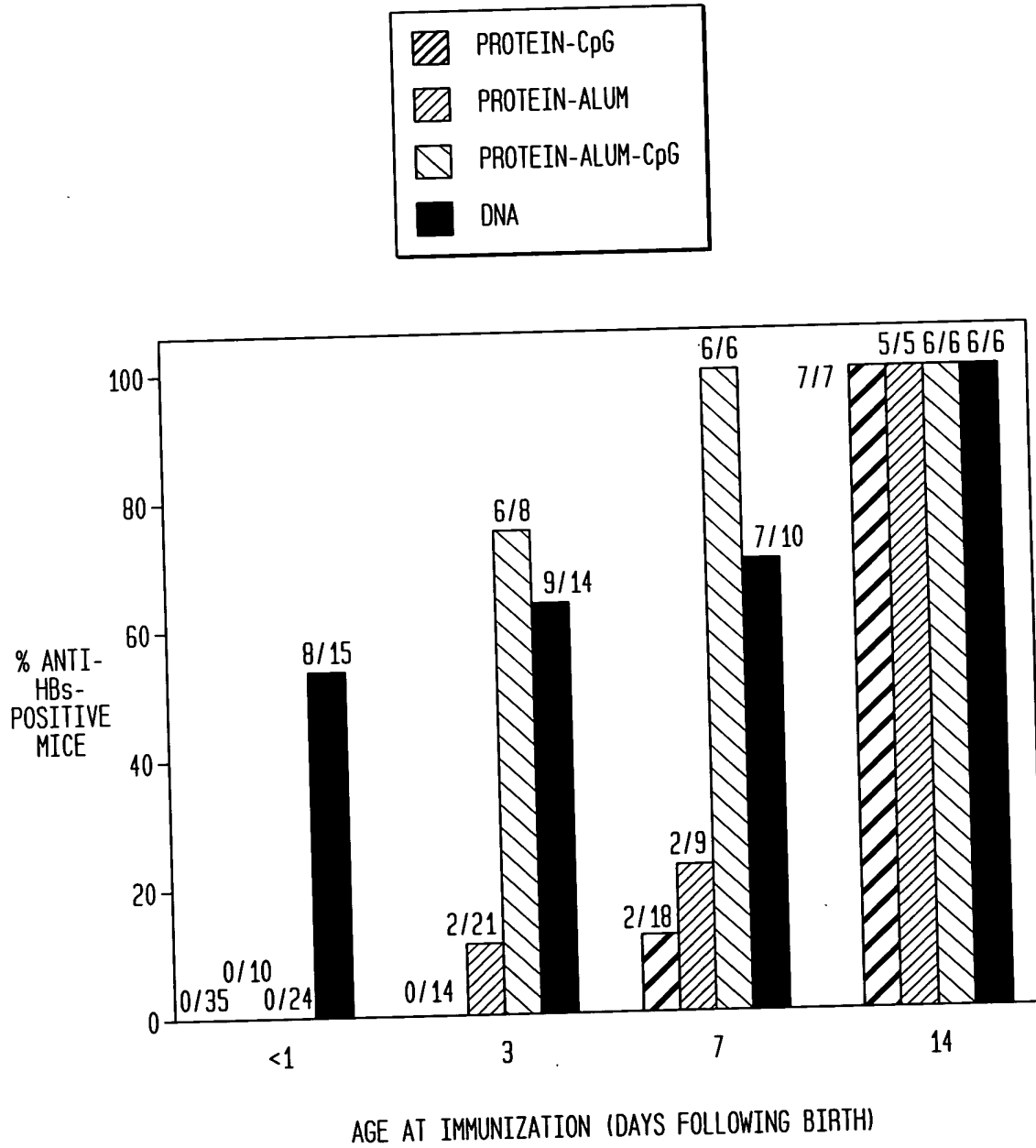


* THE NUMBER ABOVE EACH BAR IS RATIO OF IgG2a/IgG1

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FIG. 8

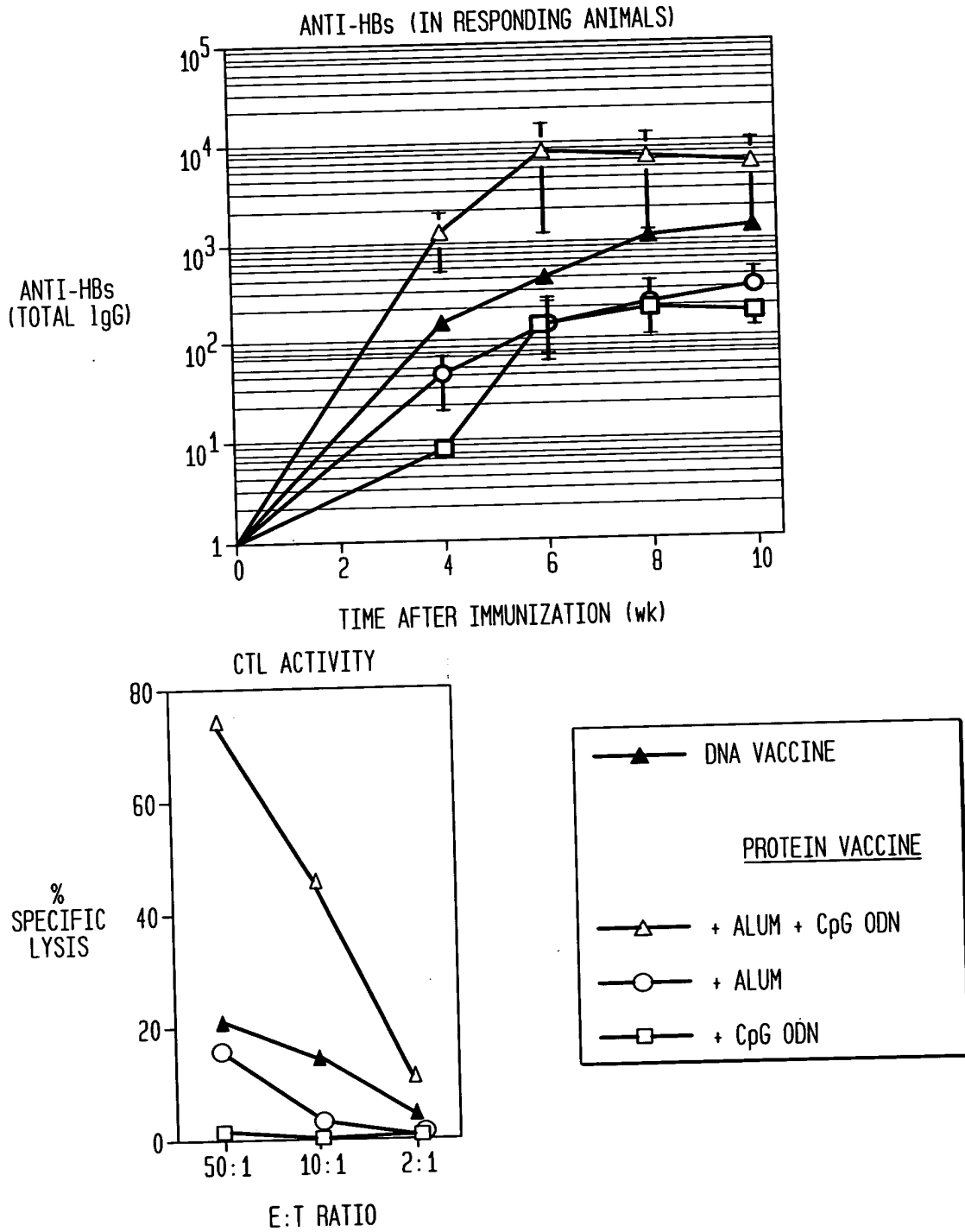
SEROCONVERSION IN NEONATAL MICE WITH
DIFFERENT IMMUNIZATION STRATEGIES



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FIG. 9

IMMUNIZATION OF 7-DAY OLD BALB/c MICE AGAINST HBsAg
DNA VS PROTEIN VACCINE AND EFFECT OF ADJUVANT



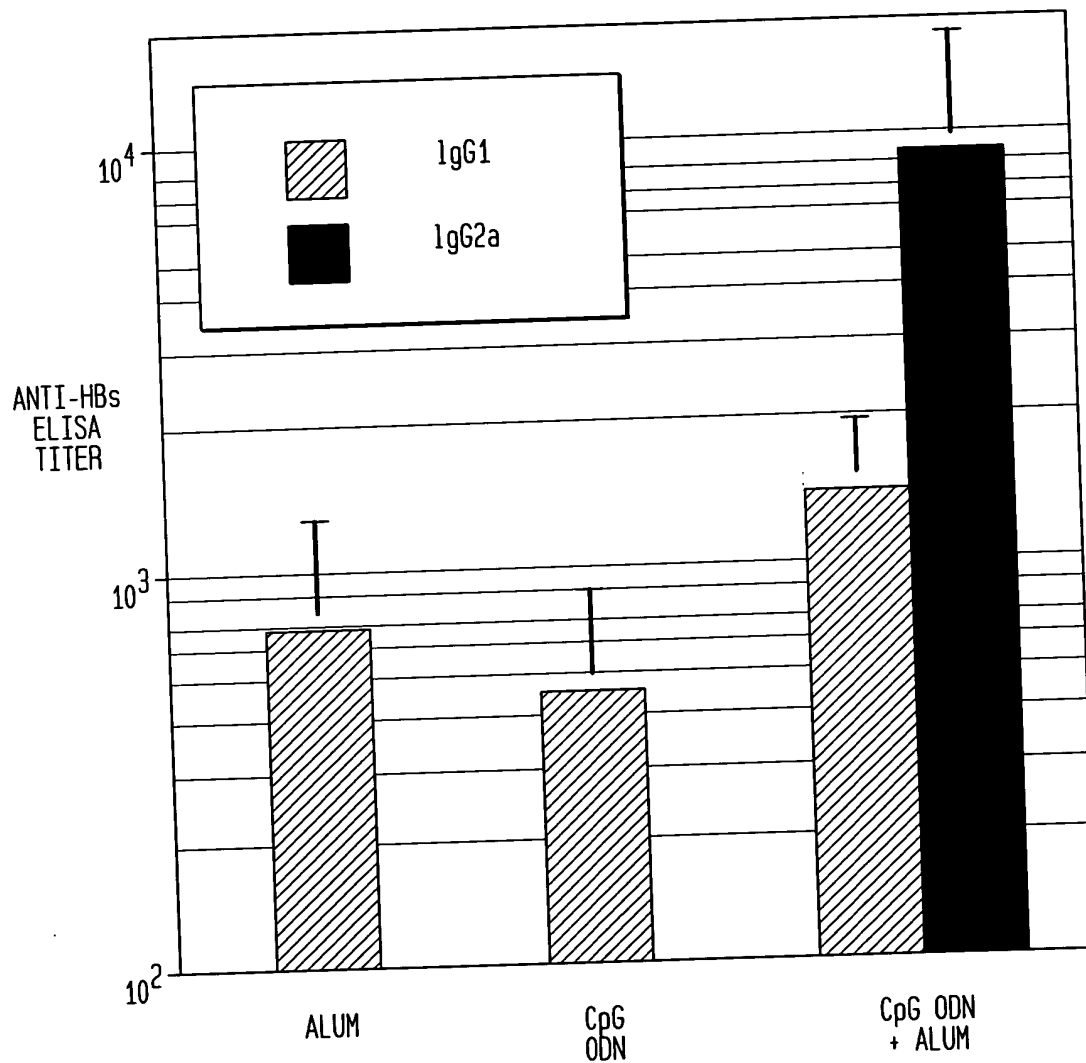
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FIG. 10

DNA VS PROTEIN IMMUNIZATION IN
NEONATAL (7 DAY OLD) BALB/c MICE

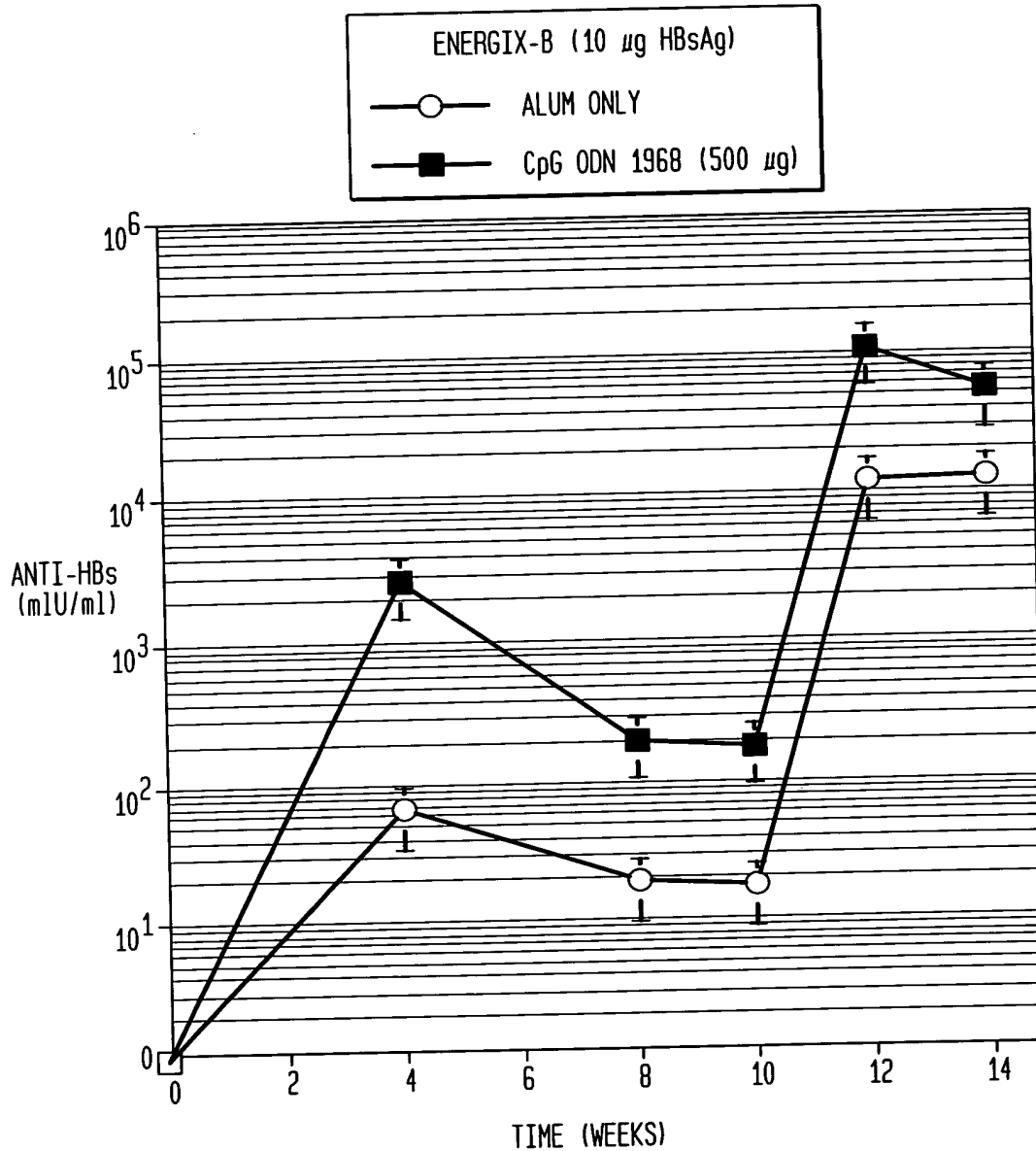
EFFECT OF ADJUVANT ON AB ISOTOPE



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FIG. 11

IMMUNIZATION OF CYNOMOLGUS MONKEYS AGAINST HBsAg
IMMUNOSTIMULATORY EFFECT OF CpG ODN WITH ENERGIX-B®



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FIG. 12

ANTI-HBs
ANTIBODY
(mIU/ml)

CpG DNA OVERCOMES HYPO-RESPONSIVENESS TO HBsAg IN ORANGUTANS

FIG. 12

